

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 March 2005 (03.03.2005)

PCT

(10) International Publication Number
WO 2005/019349 A2

- (51) International Patent Classification⁷: **C09C 1/42**
- (21) International Application Number:
PCT/US2004/018934
- (22) International Filing Date: 15 July 2004 (15.07.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/493,808 11 August 2003 (11.08.2003) US
- (71) Applicant (for all designated States except US): **IMERYS KAOLIN, INC.** [US/US]; 774 Georgia Kaolin Road, Dry Branch, GA 31020 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **SARE, Edward, J.** [US/US]; 161 Saddle Run Court, Macon, GA 31210 (US). **ADKINS, Tommy, L.** [US/US]; Route 5, Box 101, Cochran, GA 31014 (US). **RAPER, Stephen, C.** [US/US]; 292 Etowah Drive, Byron, GA 31088 (US). **FIGLAR, Julie** [GB/US]; 215 Plantation Drive, Macon, GA 31210 (US).
- (74) Agent: **GARRETT, Arhtur, S.**; Finnegan, Henderson, Farabow, Garrett & Dunner L.L.P., 1300 I Street, NW, Washington, DC 20005-3315 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HIGH WHITENESS METAKAOLIN AND HIGH WHITENESS FULLY CALCINED KAOLIN

(57) Abstract: The present invention relates to calcined kaolins having optimal whiteness and brightness properties. The calcined kaolins can comprise metakaolin, fully calcined kaolin, or flash calcined kaolin. The kaolin can be calcined from hydrous kaolin that has been subjected to enhanced magnetic separation. The resulting calcined kaolin can have a whiteness defined by a Hunter lab coordinate L value of at least about (96). The calcined kaolin can also have a brightness of at least about (90), as measured by a Technibrite TB-1 C instrument. The present invention also relates to methods of preparing calcined kaolins. The present invention also relates to paints, polymers, coatings, ceramics, paper, and cementitious products comprising these calcined kaolins.



WO 2005/019349 A2